



Air Quality Update

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North Carolina Division of Air Quality**

**Environmental Review Commission
January 18, 2011**



Topics

- **Status of EPA Review of National Ambient Air Quality Standards and the Impact on NC**
- **Status of Federal Boiler Maximum Achievable Control Technology (MACT) Rule**
- **NC's Greenhouse Gas (GHG) Permitting Rule**
- **Status of Titan Air Quality Permit**
- **Status of TVA Litigation**



National Ambient Air Quality Reviews

Ongoing as of January 13, 2011

MILESTONE	POLLUTANT						
	Ozone	Fine Particles (PM)	NO ₂ Primary	SO ₂ Primary	NO ₂ & SO ₂ Secondary	Carbon Monoxide (CO)	Lead (Pb)
Notice of Proposed Rulemaking	<u>Jan 6, 2010</u>	Feb 2011	<u>Jun 26, 2009</u>	<u>Nov 16, 2009</u>	<u>Jul 12, 2011</u>	<u>Jan 28, 2011</u>	Nov 2013
Notice of Final Rulemaking	<u>Jul 31, 2011</u>	Oct 2011	<u>Jan 22, 2010</u>	<u>Jun 2, 2010</u>	<u>Mar 20, 2012</u>	<u>Aug 12, 2011</u>	Sept 2014

NOTES:

Underlined dates indicate court-ordered or settlement agreement deadlines.

Shaded cells indicate actions that have already occurred.



History of the Ozone Standards

- One hour standard of 0.08 parts per million (ppm) set in 1971
- One hour standard of 0.12 ppm set in 1979
- Eight-hour standard of 0.08 ppm set in 1997
- Eight-hour standard of 0.075 ppm set in 2008
- Primary standard = Secondary Standard



EPA's Reconsideration of the Ozone Standards

- **Sept. 16, 2009 – EPA announced it would reconsider the 2008 ozone standards (primary and secondary) of 0.075 ppm**
- **2008 ozone standards were not as protective as recommended by EPA's panel of science advisors, the Clean Air Scientific Advisory Committee (CASAC)**



EPA's Reconsideration of the Ozone Standards

- CASAC recommended a range of 0.060-0.070 ppm for the primary (public health) standard, and a separate vegetation exposure type level for the secondary or welfare based standard
- Note, 0.075 ppm = 75 parts per billion (ppb)



Ozone Proposal Delayed

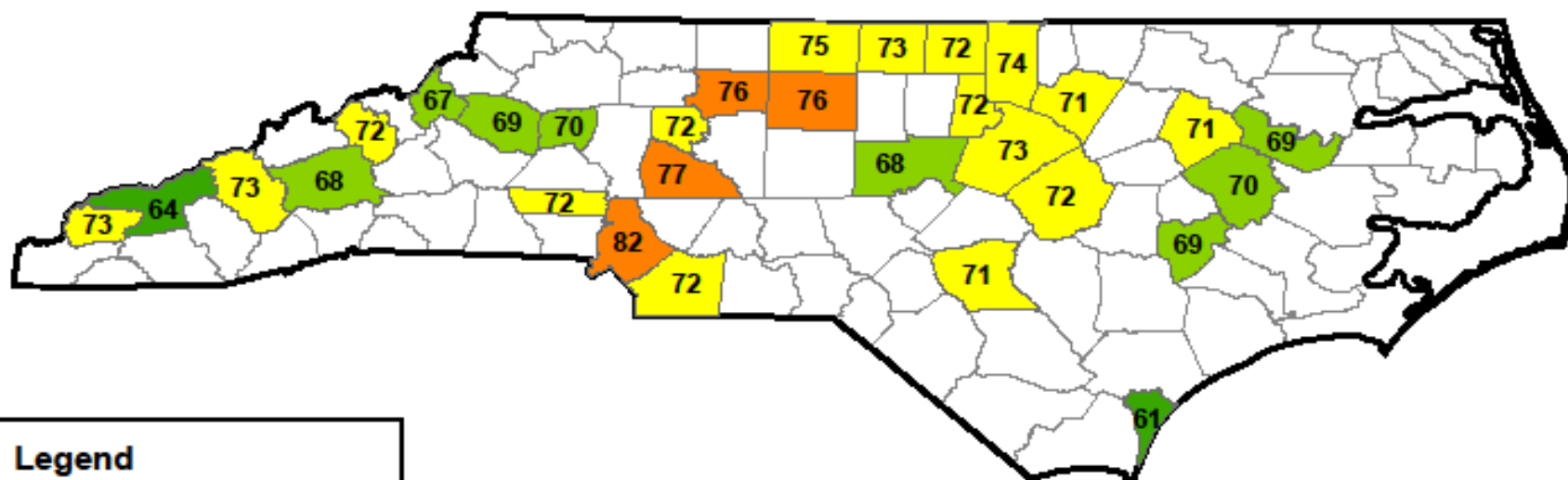
- EPA Administrator Lisa Jackson announced a delay in the final issuance of the 8-hour ozone standard until no later than July 31, 2011.
- She will “ask CASAC for further interpretation of the epidemiological and clinical studies they used to make their [60-70 ppb] recommendation. To ensure EPA's decision is grounded in the best science, EPA will review the input CASAC provides before the new standard is selected.”



Schedule

- **December 2010 – EPA Announced a Delay to Allow for Clarification of Issues with CASAC**
- **July 2011 – Final Reconsidered Ozone Standards**
- **July 2012- July 2013 - Final Boundary Designations**
- **3 Years After Designations – State Implementation Plans (SIPs) Due**

Current 3-Year Ozone Design Values (Maximum Value per County)



Legend

Ozone Design Values 2008-2010*

- < 66ppb
- 66 - 70ppb
- 71 - 75ppb
- 76 - 84ppb
- > 84ppb



Sulfur Dioxide (SO₂)

June 2010 - New scientific studies provide stronger evidence for link between short-term SO₂ exposures, ranging from 5 minutes to 24 hours, and adverse respiratory outcomes.

USEPA Revoked

- Annual standard = 30 parts per billion (ppb)
- 24-hr standard = 140 ppb

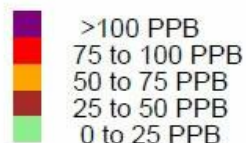
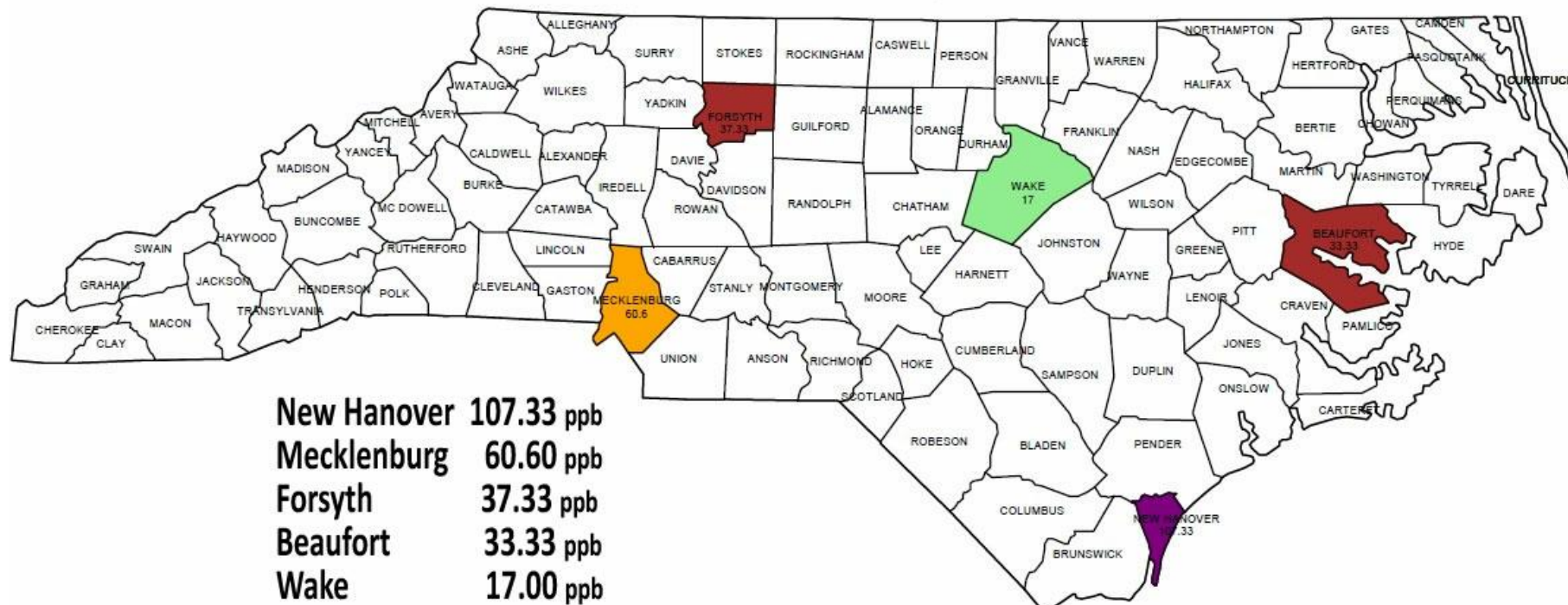
USEPA Set New 1-hr standard = 75 ppb

- 3-year average of the annual 99th percentile of 1-hour daily max concentrations

Division of Air Quality



SO2 99th Percentile, 2007-2009

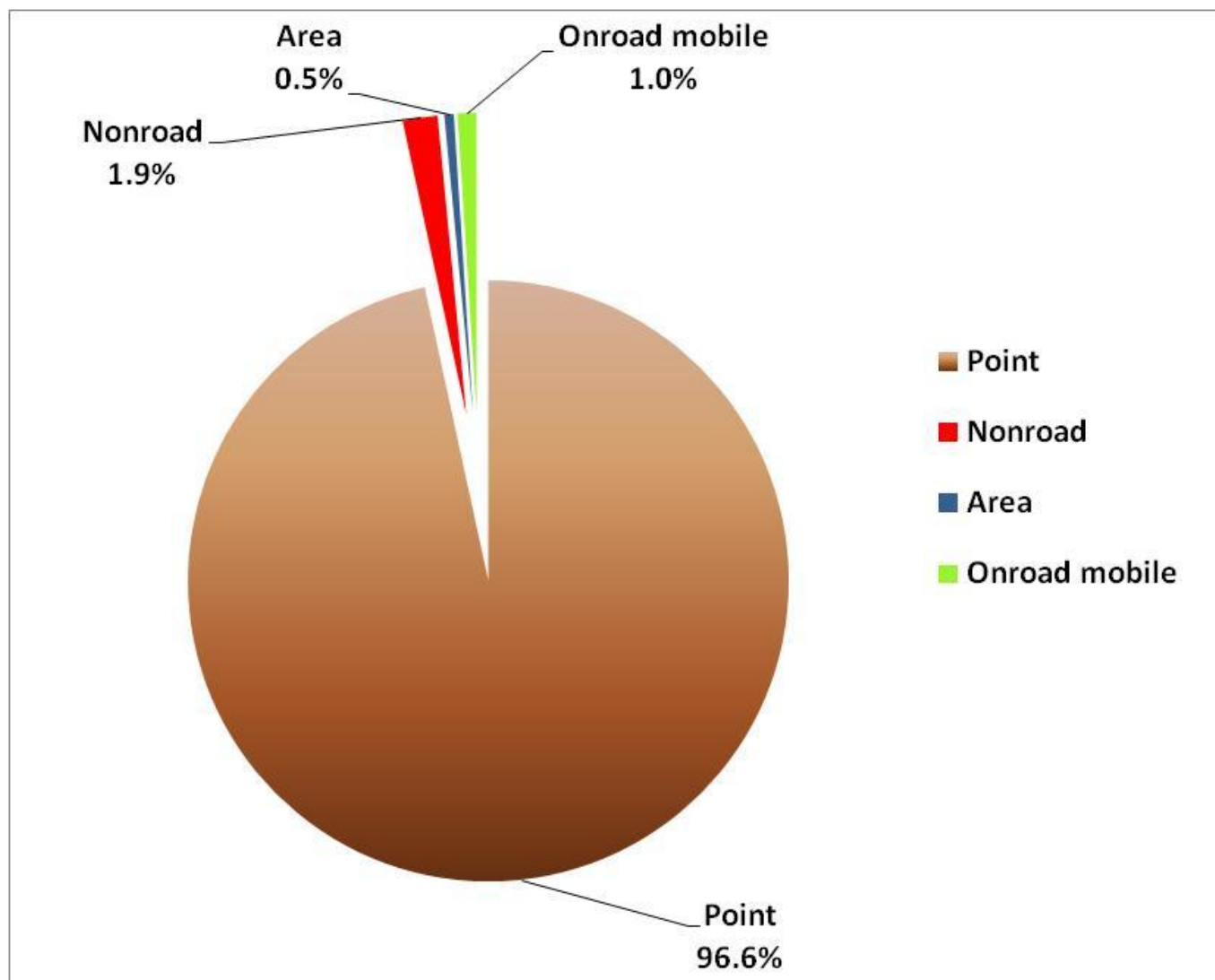


New SO2 standard = 75 ppb

NC DENR
DAQ/Statistical Services
using TIBCO Spotfire S+(R)
Mon Oct 11 17:03:29 EDT 2010



2009 SO₂ Emissions Inventory New Hanover, Brunswick, Pender Counties





Federal Boiler MACT Rule

- Rule first promulgated in 2004
- DC Circuit Court vacated the rule in 2007
- EPA proposed new rule on June 4, 2010
- EPA estimates more than 250 boilers in NC affected by proposed rule
- Significant concerns raised about proposed standards
- EPA recently asked Court for 18-month extension to finish rulemaking



Section 112(j) MACT Hammer

- Question of whether MACT “Hammer” applies in light of vacatur of standards
- Federal court decision in NC recognized that vacatur of MACT standards does trigger “hammer” provisions
- Attorney General’s Office policy memo
- DAQ implementation of 112(j) permitting process



History of Titan Application

- 2/26/2008 - Initial application received
- 9/11/2009 – Preliminary Determination and Draft permit sent to notice
- 11/30/2009 - Two public hearings held at the Cape Fear Community College
- 4/30/2010 - Judge issues injunction preventing DENR from taking further action on Titan application on the basis that SEPA applies
- 12/27/2010 – Judge signed order dissolving the DENR injunction



Next Steps

- Application to be update to address revised regulations:
 - Federal Maximum Achievable Control Technology (MACT) Standard (revised by EPA 11/8/2010)
 - Includes more stringent mercury standard
 - Federal New Source Performance Standard for Cement plants (revised by EPA on 11/8/2010)
 - PSD for Greenhouse Gasses (Safe Harbor Request)
 - Newly applicable January 2, 2011
 - New Hourly National Ambient Air Quality Standards
 - Sulfur Dioxide
 - Nitrogen Dioxide



Next Steps

- Verify Compliance with New Standards
- Prepare revised Preliminary Determination
- Post Public Notice
- Public Hearing
- Final Agency Decision



Greenhouse Gas (GHG) Permitting

- In April 2007, the US Supreme Court ruled that GHG emissions are air pollutants covered by the Clean Air Act.
- In response to that ruling and litigation from environmental groups, the EPA issued GHG emissions standards for motor vehicles in June 2010.
- That action also triggered Prevention of Significant Deterioration (PSD) permitting requirements for utilities, industries, businesses and other point sources of GHG emissions.
- In June 2010, the EPA issued the GHG Tailoring Rule to limit the kinds of GHG point sources subject to PSD permitting program.



GHG Permitting

- NC rules covered GHGs automatically based on how “regulated pollutants” are referenced.
- NC began rulemaking to adopt the higher thresholds per the federal tailoring rule.
- EMC adopted the rule at the November 18, 2010 meeting.
- RRC approved rule at December 16, 2010 meeting.
- RRC received 19 letters of objection.
- GHG Tailoring Rule now under legislative review.



Update on TVA Litigation

- On 7/26/10 the US Court of Appeals for the 4th Circuit issued its judgment in favor of TVA.
- In the Court's opinion, the federal Clean Air Act pre-empts a claim by a State of a common law public nuisance against regulated sources in another State.



Update on TVA Litigation

- North Carolina petitioned the 4th Circuit for rehearing, but that petition was denied on 9/21/10.
- On 11/23/10, the US Supreme Court granted North Carolina an extension of time in which to petition for a writ of certiorari. (A petition for writ of certiorari is the usual vehicle by which the Supreme Court reviews matters and is the applicable procedure in this case.)



Update on TVA Litigation

- North Carolina now has until 2/3/11 to file its petition for writ of certiorari.
- There is no deadline by which the Supreme Court must decide whether to hear the case or deny the petition.



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